



## **Final Statement of Reasons for Rulemaking**

Including Summary of Comments and Agency Responses

**PUBLIC HEARING TO CONSIDER  
THE AIRBORNE TOXIC CONTROL MEASURE FOR EMISSIONS OF  
CHLORINATED TOXIC AIR CONTAMINANTS FROM AUTOMOTIVE  
MAINTENANCE AND REPAIR ACTIVITIES**

Public Hearing Date: April 27, 2000

Agenda Item No.: 00-4-1

State of California  
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking,  
Including Summary of Comments and Agency Responses

**PUBLIC HEARING TO CONSIDER THE AIRBORNE TOXIC CONTROL MEASURE  
FOR EMISSIONS OF CHLORINATED TOXIC AIR CONTAMINANTS FROM  
AUTOMOTIVE MAINTENANCE AND REPAIR ACTIVITIES**

Public Hearing Date: April 27, 2000  
Agenda Item No.: 00-4-1

**I. GENERAL**

On April 27, 2000, the Air Resources Board (ARB or Board) conducted a public hearing to consider the adoption of a proposed airborne toxic control measure (ATCM) that would limit emissions of chlorinated toxic air contaminants from automotive maintenance and repair (AMR) activities. The Staff Report: Initial Statement of Reasons for the Proposed Airborne Toxic Control Measure for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities (staff report) was prepared and made available to the public on March 10, 2000. The staff report is incorporated by reference herein. This Final Statement of Reasons for Rulemaking (FSOR) updates the staff report by identifying and explaining the modifications that were made to the original proposal. The FSOR also summarizes the written and oral comments received during the 45-day comment period preceding the April 27, 2000, public hearing, at the hearing itself, and during the two 15-day comment periods, and contains the ARB's responses to those comments.

At the April 27, 2000, public hearing, the Board adopted Resolution 00-11, in which the Board approved the proposed ATCM with modifications to the originally proposed language. All of the modifications to the original proposal are described in Section II of this FSOR, entitled "Modifications Made to the Original Proposal." In accordance with Government Code section 11346.8(c), Resolution 00-11 directed the Executive Officer to adopt the ATCM, with the modifications specified by the Board, after making the modified regulatory language available for public comment, and to make such additional modifications as might be appropriate in light of the comments received.

A "Notice of Public Availability of Modified Text," together with the modified text of the regulation, with the modifications clearly indicated, was mailed on May 12, 2000, to each of the individuals described in subsections (a)(1) through (a)(4) of section 44, title 1, California Code of Regulations (CCR). By this action, the modified regulation was made available to the public for a 15-day comment period from May 12, 2000, to May 30, 2000, pursuant to Government Code section 11346.8. After reviewing the public comments, the Executive Officer then determined that additional modifications should be made to the regulation, and a "Supplemental Notice of

Public Availability of Modified Text," together with the modified text of the regulation, with the supplemental modifications clearly indicated, was mailed on September 19, 2000, to each of the individuals described in subsections (a)(1) through (a)(4) of section 44, title 1, CCR. By this action, the modified regulation was made available to the public for a supplemental 15-day comment period from September 19, 2000, to October 5, 2000, pursuant to Government Code section 11346.8. The Executive Officer then determined that no additional changes should be made to the regulation, and subsequently issued Executive Order No. G-00-67, by which the modified regulation was adopted. The adopted regulation will be contained in section 93111, title 17, CCR.

Section 93111(h) of the adopted regulation incorporates by reference ARB Method 310, which is the test method used to determine compliance with the regulatory standards. This incorporation is consistent with the longstanding and accepted ARB practice in which test methods are incorporated by reference in ARB regulations. Specifically, Method 310 is already incorporated by reference in the various ARB consumer products regulations (see sections 94506, 94515, and 94526, title 17, CCR). This practice reflects the fact that test methods in general (including Method 310) are long and complex documents that are of limited interest to most of the regulated community.

In preparing this regulatory proposal, the ARB staff considered the potential economic impacts on California business enterprises and individuals, the fiscal effect on state and local government, and the fiscal effect on federal funding of state programs. A detailed discussion of these impacts is included in the staff report, and in the Economic and Fiscal Impact Statement (STD. Form 399).

The Board has determined, pursuant to Government Code section 11346.5(a)(3)(B), that the regulations may affect small business. The Board has further determined that no alternative considered by the agency would be more effective in carrying out the purposes for which the regulatory action was proposed, or would be as effective and less burdensome to affected private persons, than the action taken by the Board.

## **II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL**

This section describes the modifications that were made to the originally proposed regulatory text, and explains the rationale for the modifications. The modifications are addressed in the order they appear in the Final Regulation Order (section 93111, title 17, CCR).

### **Section 93111(b) Exemptions**

Section 93111(b) was modified in order to clarify that the regulatory requirements do not apply to solvent cleaning machines, or to liquid products that are designed solely for use in solvent cleaning machines. The regulation was never intended to apply to such machines or products, and the modifications clarify that this is the case.

### Section 93111(c) Definitions

Concurrent with the exemption discussed above, section 93111(c) was modified to add a definition of the term “Solvent Cleaning Machine.” The definition reflects the generally accepted meaning of this term.

### Section 93111(d)(1) Standards for Automotive Consumer Products

Modifications were made to the originally proposed effective dates (and the sell-through period, as discussed below under Section 93111(e)). In making these changes, the Board expressed concern that the originally proposed effective dates and sell-through period were not adequate to address public health and multimedia impacts, and recognized that complying alternate products are currently available and constitute the majority of products in the regulated product categories.

The originally proposed ATCM specified an effective date of December 31, 2002. It was proposed that brake cleaners, carburetor or fuel-injection cleaners, engine degreasers, and general purpose degreasers (AMR products) manufactured after this date could not be sold for use in California if they contained Perc, MeCl, or TCE. At the Board hearing, the December 31, 2002, effective date was changed to an earlier effective date of June 30, 2001.

In addition, the originally proposed ATCM prohibited owners or operators of automotive maintenance and automotive repair facilities, after June 30, 2005, from using AMR products that contain Perc, MeCl, or TCE. At the Board hearing, the June 30, 2005, date was changed to December 31, 2002. After December 31, 2002, AMR products that contain Perc, MeCl, or TCE cannot be used in any California AMR facility.

### Section 93111(e) Sell-through of Products

The originally proposed ATCM also provided an 18-month sell-through period, which allowed AMR products containing Perc, MeCl, or TCE, and manufactured before the December 31, 2002 effective date, to be sold in California for up to 18 months after this effective date. At the hearing, the Board shortened the sell-through period from 18 months to 12 months. The modified sell-through provision allows AMR products containing Perc, MeCl, or TCE, and manufactured before the new June 30, 2001 effective date, to be sold in California for up to 12 months after this effective date.

### Section 93111(f) Administrative Requirements--Code Dating

The originally proposed language required that code-dating by the manufacturer must begin twelve months prior to the effective date of the standards (i.e. one year before December 31, 2002). This twelve-month lead time is consistent with the lead time for code-dating in other consumer products regulations, and was intended to assist distributors, retailers, and users in managing their inventory and determining which products were legal to sell during the sell-through period, and to use after the date on which use of non-complying products is

prohibited in AMR facilities. Because the effective date of the standards was moved up to June 30, 2001, it was also necessary to move up the code-dating requirement. Accordingly, the effective date of the code-dating requirement was modified to require that code-dating must begin within 30 days of the effective date of section 93111. For those manufacturers who choose to use a code indicating the date of manufacture, the parallel requirement to file an explanation of this code with the ARB was also moved up, and the modified language specifies that the explanation of the code must also be filed no later than 30 days after the effective date of section 93111.

#### Section 93111(h) Test Methods

The originally proposed language stated that ARB Method 310 was last amended on November 16, 1999. This date was incorrect. The correct date of the last amendment was actually September 3, 1999, and the regulatory text was modified to so indicate. Additionally, in response to public comments, changes were made to the regulatory text to clarify that, for the purposes of determining compliance with section 93111 only, references to the term "VOC" in ARB Method 310 means "chlorinated toxic air contaminant."

### **III. SUMMARY OF COMMENTS AND AGENCY RESPONSES**

The Board received numerous written and oral comments in connection with the 45-day comment period, the April 27, 2000, hearing, and the two 15-day comment periods. A list of commenters is set forth below, identifying the date and form of all comments that were submitted. Following the list is a summary of each comment made regarding the ATCM, together with an explanation of how the ATCM has been changed to accommodate the comment, or the reasons for making no change.

#### **A. Responses to Comments Received during the 45-day Public Comment Period and at the Board Hearing**

##### Comments Received during the 45-day Public Comment Period and at the Board Hearing

<u>Abbreviation</u>	<u>Commenter</u>
AAIA	Aaron M. Lowe, Vice President Government Affairs Automotive Aftermarket Industry Association written testimony: April 26, 2000 oral testimony: April 27, 2000
ASC	Michael Walsh Automotive Service Council oral testimony: April 27, 2000
BAAQMD	Ellen Garvey, Executive Officer/APCO Bay Area Air Quality Management District

	written testimony: April 24, 2000
CIWMB	Ralph E. Chandler, Executive Director California Integrated Waste Management Board written testimony: April 20, 2000
Clayton	James E. Clayton, President Clayton Associates, Inc. written testimony: April 24, 2000
CSMA	D. Douglas Fratz, Vice President Scientific & Technical Affairs Chemical Specialties Manufacturers Association written testimony: April 25, 2000
DTSC	Edwin F. Lowry, Director Kim Wilhelm, Chief, Pollution Prevention Branch Department of Substances Control written testimony: March 24, 2000 oral testimony: April 27, 2000
EBMUD	David Williams East Bay Municipal Utilities District written testimony: April 11, 2000
EES	Chris Goff Evergreen Environmental Systems oral testimony: April 27, 2000
EHC	Paula Forbis, Co-director, Toxic-Free Neighborhood Campaign and Laura Hunter, Clean Bay Campaign Environmental Health Coalition written and oral testimony: April 27, 2000
HSIA	Stephen P. Risotto, Executive Director Halogenated Solvents Industry Alliance written testimony: April 26, 2000 oral testimony: April 27, 2000
IRTA	Katy Wolf, Ph.D., Executive Director Institute for Research and Technical Assistance written testimony: April 17, 2000 oral testimony: April 27, 2000
KT	Chuck Kennedy Kleen Tech

	oral testimony: April 27, 2000
LACSD	Paul C. Martyn, Head Industrial Waste Section Los Angeles County Sanitation District written testimony: April 26, 2000
Midas	Dale Politte, General Manager Midas (San Diego) written testimony: April 24, 2000
NRDC	Gail Ruderman Feuer, Senior Attorney Natural Resources Defense Council written and oral testimony (presented by EHC): April 27, 2000
OEHHA	Melanie A. Marty, Ph.D., Chief Air Toxicology and Epidemiology Section Office of Environmental Health Hazard Assessment written testimony: April 25, 2000
RWQCP	Phil Bobel, Manager Environmental Control Programs Regional Water Quality Control Plant - Palo Alto written testimony: March 30, 2000
SC	V. John White Sierra Club written and oral testimony (presented by EHC): April 27, 2000
SCAQMD	Barry Wallerstein, Executive Director South Coast Air Quality Management District written testimony: April 20, 2000
SDB	Bruce Reznik, Executive Director San Diego BayKeeper written and oral testimony (presented by EHC): April 27, 2000
SDCAPCD	R.J. Sommerville, Director San Diego County Air Pollution Control District written testimony: April 21, 2000
SJVUAPCD	David L. Crow, Executive Director/APCO San Joaquin Valley Air Pollution Control District

	written testimony: April 18, 2000
STP	Donna Frye, Founder Surfers Tired of Pollution written and oral testimony (presented by EHC): April 27, 2000
Tri-TAC	Phil Bobel, Tri-TAC Chair Tri-TAC written testimony: April 3, 2000
Tri-TAC-Heil	Ann Heil Tri-TAC oral testimony: April 27, 2000
U.S. EPA	Debbie Jordan, Acting Director Air Division United States Environmental Protection Agency written testimony: April 24, 2000

### Comments and Responses

1. Comment: The ARB has failed to establish that the proposed ATCM would provide significant health benefits to California residents. (CSMA, HSIA)

Agency Response: The ARB disagrees with this comment. The staff report clearly outlines the public health benefits that the ATCM will provide to California residents. The ATCM will remove approximately 5.2 tons per day of perchloroethylene (Perc), methylene chloride (MeCl), and trichloroethylene (TCE) from the air, thereby decreasing exposure to toxic air contaminant emissions and concomitant potential health impacts by those individuals who reside and work near these facilities. In addition, the ATCM will lessen multimedia impacts including soil and groundwater contamination, and it will reduce worker exposure to emissions of these compounds.

2. Comment: Analysis performed by staff of the Air Quality Measures Branch of the ARB indicated that the only area of potential Perc increase was in automotive products and subsequent surveys suggest that Perc use has remained steady or declined. (HSIA)

Agency Response: The ARB acknowledges that Perc use in brake cleaners has remained relatively constant and that carburetor cleaners are predominantly non-chlorinated. However, staff analysis indicates that the potential for the public to be exposed to unacceptably high risk from current product usage levels is significant. Additionally, Perc use in engine degreasers has increased significantly and current information from water agencies suggests that engine degreasers are responsible for increasing Perc concentrations observed at publicly-owned treatment works (POTWs).



3. Comment: Risk assessment data provided by a consultant contracted by HSIA shows lower (less significant) health impacts than data presented by ARB. (AAIA, CSMA, HSIA)

Agency Response: ARB's risk assessment data is based on data collected by ARB staff during the site visits and the facility survey. The risk assessment and modeling methodologies are consistent with the 1993 California Air Pollution Control Officers Association (CAPCOA) Risk Assessment Guidelines (Risk Assessment Guidelines) and represent a reasonable health-protective assessment of potential health impacts from Perc emissions at AMR facilities statewide.

HSIA's consultant has reported different off-site modeled concentrations for 13 of the 54 specific facilities evaluated for potential health impacts (the consultant did not report any concentrations for the 41 remaining facilities). Despite numerous requests, HSIA did not provide ARB staff with a full report on their consultant's work that includes an outline of how emission rates were calculated, source characteristic information, model input parameters, receptor information, and other assumptions that were used in their air dispersion modeling efforts. ARB staff believes that this information is crucial because it directly affects the outcome of any modeling effort. Without this information, ARB staff cannot determine if HSIA's efforts were consistent with the Risk Assessment Guidelines. HSIA has provided a series of summary tables which show their final results; however, this is insufficient to use as a basis to evaluate the differences. Without the aforementioned full report on their findings, ARB staff is unable to determine why the impacts reported by HSIA are, in some cases, different than ARB's results and whether HSIA's methodologies and assumptions are consistent with the Risk Assessment Guidelines.

4. Comment: ARB risk assessment data for 13 of the 54 specific facilities differs between the May 11, 1999, memorandum and the staff report released on March 10, 2000. (AAIA, CSMA, HSIA)

Agency Response: The data released in ARB's May 11, 1999, memorandum contained preliminary draft data and was intended to provide preliminary results and to share the methodology and assumptions that were being used in the analysis. ARB staff made it clear in the memorandum releasing the draft data that they had not yet verified all the data and were looking to the working group to assist in this endeavor. No specific comments regarding the May 11, 1999, memorandum were received from members of the public or industry.

After the results had been reviewed, staff discovered that the receptor grid (100-meter) originally used for determining maximum impacts (a determination of maximum impacts is required by the Risk Assessment Guidelines) did not provide sufficient resolution. Greater resolution is needed to properly estimate potential health impacts for those receptors that were observed during the site visits to be less than 100 meters from each facility. As a

result, a grid with five times greater resolution (a 20-meter grid), consistent with ARB and CAPCOA practices, was used. This finer resolution allowed ARB staff to more accurately identify maximum exposed individual residential and worker receptors and the resultant concentrations at those locations than with the 100-meter grid used in the preliminary draft analysis. It is this improvement in resolution that caused receptor locations to change between the two data sets. Using a profile of receptors collected in the field for each modeled facility, staff verified that the predicted maximum concentrations actually occurred near a valid receptor. The underlying data in the model remained unchanged.

5. Comment: The use of the near-source location in ARB's assessment of health impacts is inappropriate because there is no precedent for its use in regulatory development. (HSIA)

Agency Response: The ARB disagrees with this comment. The risk assessments in the staff report follow the CAPCOA Risk Assessment Guidelines. The Risk Assessment Guidelines state that risk assessments should include an estimate of the maximum off-site cancer risk (point of maximum impact) as well as the maximum individual off-site cancer risk at existing residential and worker receptors. All previous ATCMs used the near-source location in their estimation of potential health impacts, which were considered as close as 10 meters from the center of the facility (e.g. Perchloroethylene Dry Cleaning ATCM). A summary of the use of the near-source location in previous regulatory efforts, as well as non-regulatory efforts, has been shared with HSIA on several occasions.

HSIA states in its comment letter that the Gasoline Service Station Industrywide Risk Assessment Guidelines did not use a near-source location. In fact, a near-source location of 20 meters was used (see page 4 and pages E-1 through E-6 of Appendix E of the staff report), which is consistent with the modeling efforts in the development of this ATCM as well as the Risk Assessment Guidelines. This also helps to demonstrate that the ARB has been consistent in its use of the near-source location to estimate potential health impacts.

6. Comment: ARB's assumptions regarding the number of jobs conducted by repair facilities per day and the amount of aerosol product used per brake job for the generic facility modeling scenarios are overestimated. (HSIA)

Agency Response: The ARB disagrees with this comment. The number of brake jobs performed and the amount of Perc-containing product used per brake job were based on information collected by ARB from the site visits and the Facility Survey which was sent to 25,000 AMR facilities. Statistical analysis (see Chapter V of the staff report) indicates that ARB's surveys are sufficiently representative of AMR facilities in California. ARB staff estimates on the number of brake jobs performed and product usage rates for small, medium, and large generic facilities is based on the site visit data and represents a reasonable health protective scenario. As discussed in the staff report, the generic facilities were verified for their representativeness with data from industry surveys and publications, the Facility Survey, and additional site visits and telephone calls conducted by ARB staff.

7. Comment: Water-based cleaning units are not effective in cleaning brakes and may pose a safety risk due to increased brake failures if chlorinated aerosols are not available. (CSMA, HSIA)

Agency Response: The ARB disagrees with this statement. Several organizations, including the United States Environmental Protection Agency (U.S. EPA) and the Institute for Research and Technical Assistance (IRTA), have conducted studies to evaluate the effectiveness of water-based cleaning systems in a wide variety of applications, including brake cleaning. These studies have shown that not only are water-based systems safe and effective, they often result in significant cost savings for the facility. Our discussions with facility operators, mechanics, and brake parts manufacturers indicated that water-based brake cleaning units are safe and effective cleaning systems. Based on data collected from the Facility Survey and site visits, these units are used regularly at approximately half of the AMR facilities statewide.

In regard to increased brake failures, neither CSMA nor HSIA has provided any data to substantiate this claim. Furthermore, ARB staff was unable to find any data that would validate this claim. Discussions with facility operators and mechanics indicate that the water-based products clean effectively and do not result in increased brake failures.

8. Comment: An increase in the use of non-chlorinated products, which are typically flammable, will lead to an increase in fires and other fire-related incidents at AMR facilities. (AAIA, CSMA, HSIA)

Agency Response: Despite numerous requests from ARB staff, product manufacturers and their associations have not provided any data to substantiate this claim. The majority of products currently in use at AMR facilities are flammable in nature and data collected during the site visits indicated that most facility operators consider all aerosol products flammable and use common safety precautions when using these products. Additionally, staff discussions with fire marshals and approximately 100 fire chiefs and fire prevention officers did not result in any reported incidents or injuries associated with the use of flammable automotive consumer products as opposed to gasoline.

Each AMR facility has a wide variety of flammable products on-site requiring that mechanics use good safe work practices. During the site visits (including 16 additional visits conducted specifically to further investigate flammability issues), facilities indicated that they typically consider all aerosol products as flammable and treat them accordingly. In fact, the site visits showed that flammable products have been used near heat and flame sources as close as the next service bay without incident. This shows that the AMR facilities have been able to apply good safe work practices that are effective in regard to product flammability.

HSIA states in its letter that ARB staff identified one facility where a fire resulted from non-chlorinated aerosol use. ARB staff notes that this characterization is incorrect because the facility in question experienced a flash using a carburetor cleaner (which are

required to be non-chlorinated in order to comply with federal requirements) when overspray came into contact with a faulty exhaust gas recirculation (EGR) valve on the vehicle. No one was injured as a result of the flash, and the facility continues to use non-chlorinated products exclusively.

Facility owners and mechanics visited by ARB staff indicated that the primary criterion used when purchasing products was cost and not whether it was flammable or non-flammable. None of the facilities visited reported that product flammability was a driving factor in product selection. Additionally, a few facilities expressed concerns about the health and safety impacts of "poison gas" formation (referring to phosgene and other gases) when chlorinated aerosols are used near heat and flame sources. As a result, the ARB feels that AMR facilities are typically experienced in the use and handling of flammable materials and the claim of an increase in fires or flash incidents has not been substantiated. Additional information on the flammability issue can be found on pages X-7 to X-8 of the staff report.

9. Comment: The ATCM may cause an increase in VOC emissions from automotive consumer products. (AAIA, HSIA)

Agency Response: The potential for an increase in VOC emissions is discussed at length on pages 11-12 and X-3 to X-5 of the staff report, and is also addressed on pages 3 and 4 of Resolution 00-11. To briefly summarize the ARB's conclusions, any increase in VOC emissions as a result of this ATCM is expected to be minimal. The magnitude of any increase depends on how one characterizes the "baseline" for calculating VOC emissions, and on how many current users of chlorinated products switch to non-chlorinated higher-VOC products instead of lower-VOC alternatives (such as aqueous-based brake cleaning units and parts washers). To the extent that any adverse environmental impacts may occur as a result of an increase in VOC emissions, however, the ARB has identified considerations that override any such adverse impacts (i.e., a reduction of 5.2 tons per day of Perc, MeCl, and TCE from AMR products, and a corresponding reduction in ambient levels and health risks from these compounds).

10. Comment: Many California citizens must have their brakes serviced by cleaning and reusing existing parts, thereby extending their use and saving the cost of new parts. Low-cost, highly effective cleaners such as chlorinated cleaners are needed to ensure optimal brake performance and avoid unnecessary brake wear. (CSMA)

Agency Response: As discussed at length in the staff report, highly effective non-chlorinated cleaners and water-based cleaning systems are readily available for cleaning brake parts. These products and systems work quite well to ensure optimal brake performance and avoid unnecessary brake wear, and it is not necessary to use chlorinated products to accomplish these goals.

11. Comment: ARB should modify the proposed ATCM by including a provision to allow individual automotive maintenance facilities to request exemptions allowing the continued

purchase and use of non-complying brake cleaners. Such exemptions would be approved by ARB only for those facilities with a compelling need to continue using highly effective, non-flammable brake cleaners. We have drafted proposed language that would create this exemption. (CSMA)

Agency Response: The commenter is not entirely clear about what a facility would have to show to receive an exemption. The language of the comment letter states that a "compelling need" would have to be shown for using "highly-effective, nonflammable brake cleaners." The actual language drafted by the commenter, however, more broadly states that an exemption could be granted for any AMR product, if the facility can "specify the reasons" why continued use of non-complying products is "necessary." One problem with the language suggested by the commenter is that it is extremely vague, and provides no discernable criteria for making a decision about whether an exemption is "necessary." More fundamentally, however, ARB staff does not believe that any exemption process is warranted, because staff has not found, and CSMA has not provided, information to substantiate that certain selected facilities would "need" an exemption to use chlorinated products.

During the site visits, facility owners reported that their primary product selection criterion was the cost of the product. Based on price at a particular time, a facility may receive either a chlorinated or non-chlorinated product. Many facilities do not know which type they are going to receive until they actually take delivery of the product. If the commenter is suggesting that flammability concerns would serve as the basis for an exemption, it is worth noting that none of the facilities indicated to ARB staff that the flammability of the product was a factor when deciding which product to buy, because they treat all aerosol products as flammable. If the commenter is suggesting that some facilities need chlorinated products because they are more effective, the staff report discusses at length why non-chlorinated products and processes are just as effective. In short, ARB staff believes that the need for an exemption process has not been established.

12. Comment: There is a flaw in the rule language of section 93111(h)(2) of the ATCM. If interpreted literally, this language could be interpreted to mean that any automotive maintenance product containing more than one percent VOC, as measured by Method 310, would be considered to contain more than one percent "chlorinated toxic air contaminants." That interpretation would essentially ban all current brake cleaners, engine degreasers, and carburetor cleaners. We therefore urge that section 93111(h)(2) be deleted from the ATCM. (CSMA)

Agency Response: ARB Method 310 was originally developed to measure the amount of VOCs in consumer product formulations. However, the testing methodology and procedures in Method 310 also work to measure the amount of chlorinated toxic air contaminants (TACs) in consumer products. Since the text of Method 310 refers to "VOCs" and not to chlorinated TACs, it is necessary to make a technical change to this language in order for the language to make sense when Method 310 is being used to test for chlorinated TACs. Section 93111(h)(2) of the ATCM is the technical change that

accomplishes this goal. Rather than going through the cumbersome process of creating a modified version of Method 310, complete with underlines and stikeouts, section 93111(h)(2) simply provides that, when Method 310 is used to determine compliance with the ATCM (as stated in section 93111(h)(1)), references to "VOCs" in ARB Method 310 shall instead refer to "chlorinated toxic air contaminants." This approach avoids the confusion that might be caused by having two nearly identical versions of Method 310, one version for VOCs, and one version for chlorinated TACs.

The commenter's basic point is that this technical change was done in such a way that it could be misinterpreted. While ARB staff does not think that the originally proposed language presents a problem, to avoid any potential confusion the ARB proposed clarifying language, which was made available in the first 15-day comment period. (CSMA commented on this clarifying language during the 15-day comment period; these comments are addressed in the response to Comment No. 36.). Finally, in CSMA's 45-day comments, which are set forth above, CSMA suggests that the ARB should simply delete the language instead of trying to fix it. The ARB staff chose to modify the language instead of deleting it, because deleting the language entirely would not adequately clarify how a test method for determining the VOC content of a product should be used for determining the AMR product's chlorinated TAC content.

13. Comment: The adoption of this rulemaking will work at cross-purposes with other efforts being undertaken by the Board. Staff gave little consideration to the likely possibility of higher emissions of VOCs, and the adoption of the ATCM conflicts with other ARB efforts to reduce emissions of VOCs. This rulemaking will cause problems for California attempting to improve its air quality through regulation of consumer products, and will cause significant product formulation problems for manufacturers. (AAIA)

Agency Response: The ARB did consider the effect that this rulemaking would have on VOC emissions in California. This issue is discussed in detail in the response to Comment No. 9, on pages 11-12 and X-3 to X-5 of the staff report, and on pages 3 and 4 of Resolution 00-11. The ARB has the responsibility to minimize the health impacts from exposure to TACs, as well as to reduce the formation of tropospheric ozone and particular matter by reducing VOC emissions. To the extent that there is any increase in VOC emissions as a result of this rulemaking, the ARB has identified considerations that override any such increase (i.e., a reduction of 5.2 tons per day of Perc, MeCl, and TCE from AMR products, and a corresponding reduction in ambient levels and health risks from these compounds). It is the Board's job to weigh these various considerations and strike the appropriate balance, which is what the Board did in deciding to adopt the ATCM.

Regarding the comment that banning chlorinated solvents in AMR products will cause significant reformulation problems for manufacturers, staff does not agree. When the "Midterm Measures II" amendments to the Consumer Products Regulation were developed in 1999, the VOC limits were set at levels that would allow manufacturers to formulate complying automotive consumer products without using Perc, MeCl, or TCE.

Because of this, and the fact that the majority of existing AMR products are already non-chlorinated, staff believes that reformulation should not present a significant problem for manufacturers. Should future VOC reductions become necessary from AMR products, the feasibility of such an effort would be considered at that time.

14. Comment: Some distributors and facilities may find it difficult to meet the expedited effective dates because they may not realize that they now have less time than was originally discussed by staff prior to the proposal. (AAIA)

Agency Response: At the Board hearing, the Board accelerated the effective dates and agreed that a public outreach program should be undertaken to ensure that the affected parties are aware of the ATCM requirements. The Board directed ARB staff to implement this outreach program as soon as possible. ARB staff also notes that the expedited effective dates were released for public comment during the 15-day comment period, and are readily available on the ARB's Internet site. All of these steps should insure that affected parties are made aware of the ATCM requirements.

15. Comment: Chlorinated solvents have an adverse impact on water quality. (RWQCP, Tri-TAC, EBMUD, IRTA, LACSD, EHC, SDB, STP, NRDC, SC)

Comment: The proposed ATCM is compatible with our existing solvent operation rule (Rule 1171), in that this rule encourages the use of aqueous non-toxic solvents and cleaners. By removing the toxic contaminants from these maintenance and repair products, this ATCM would have the added benefit of reducing cross-media impacts on wastewater treatment plants. (SCAQMD)

Comment: Perc used in brake cleaners and engine degreasers drips off of automotive and brake parts to the shop floor. This could lead to business site, soil, surface water, and ground water contamination near the shops. (DTSC, SJVAPCD, IRTA)

Comment: From a pollution prevention perspective, we support the adoption of viable, less toxic alternatives. Since such alternatives exist, we recommend adoption of ARB's proposal to remove Perc, MeCl, and TCE from automotive cleaning products. (U.S. EPA)

Comment: The ATCM should reduce the number of aerosol cans disposed of in municipal solid waste landfills if AMR facilities adopt alternative process measures such as aqueous-based parts washers rather than aerosol products that use non-chlorinated formulations. (CIWMB)

Comment: Water-based cleaners, including portable brake cleaning units, are suitable and cost-effective alternatives to chlorinated products. (Clayton, IRTA, Midas, U.S. EPA, KT, EES)

Agency Response: The ARB agrees with these comments. In addition to public health benefits derived from preventing emissions to the air, the ATCM will reduce the amount of Perc, MeCl, and TCE that enters through other pathways such as soil and water.

16. Comment: The District wishes to register its support for the proposed ATCM. This measure will protect public health against excessive risk of cancer from exposure to Perc, MeCl, and TCE. (SDCAPCD, SJVAPCD, BAAQMD)

Comment: The removal of Perc, MeCl, and TCE from automotive consumer products is an important step towards protecting public health. Many AMR facilities are located in low-income communities, and are in close proximity to residential receptors. (EHC, SDB, STP, NRDC, SC)

Agency Response: The ARB agrees with these comments. In addition to a reduction of 5.2 tons per day of Perc, MeCl, and TCE, this ATCM will minimize near-source health impacts to residents and off-site workers from Perc, MeCl, and TCE from automotive consumer products. Additionally, worker exposure will be reduced. Based on observations from site visits, staff concurs with the commenters that many AMR facilities are in close proximity to residential receptors as well as off-site worker receptors.

17. Comment: The ARB should develop an AMR outreach program that addresses the availability of low-cost loans, technical assistance, and training to adopt alternative measures such as aqueous cleaning units. The high initial equipment cost (\$1,500 to \$15,000) for aqueous-based portable brake cleaning units and parts washers could put a severe financial strain on small AMR facilities. (CIWMB)

Agency Response: The Board directed ARB staff to conduct public outreach to those parties affected by the ATCM. Staff's public outreach will provide a forum for educating facility operators and distributors on the availability of alternative products and will provide technical assistance for complying with the ATCM. Additionally, a compliance advisory will be mailed to all known product manufacturers.

Staff does not agree that small AMR facilities will suffer a financial strain as a result of this ATCM. Pollution prevention case studies indicate that water-based alternatives are cost-effective when compared to aerosol usage. For example, studies conducted by the Institute for Research and Technical Assistance (IRTA) and sponsored by U.S. EPA, showed that facilities reduced their operating costs by 19 to 83 percent by converting to water-based systems and not using aerosols. These case studies also showed that typical purchase costs for aqueous brake cleaning units ranged from \$350 to \$1,022. Additionally, results from the ARB surveys indicate that approximately 44 percent of AMR facilities that conduct brake work already use water-based cleaning units. For those facilities that do not wish to use water-based cleaning units, effective non-chlorinated aerosol products will still be available.



18. Comment: The ARB should continue to evaluate the reformulation of these products to ensure a rapid transition to water-based alternatives. (EHC, SDB, STP, NRDC, SC)

Agency Response: ARB agrees with this comment. Staff will closely monitor the reformulation progress of manufacturers. Staff also intends to monitor the usage of other toxic air contaminants (TACs) used in automotive consumer products, as well as in other consumer product categories, to determine whether additional assessments of the need to control these TACs should be conducted. Additional ATCMs will be proposed in the future, if warranted. In addition, staff's public outreach will provide a forum for educating facility operators and mechanics on the availability of alternative products and will provide technical assistance for complying with the ATCM.

19. Comment: The Board should expedite the effective dates and shorten the sell-through period in the ATCM. (RWQCP, Tri-TAC, EBMUD, IRTA, U.S. EPA, LACSD, EHC, SDB, STP, NRDC, SC)

Agency Response: At the Board Hearing, the Board made modifications which expedited the effective dates and shortened the sell-through period specified in the original proposal. In making these changes, the Board expressed concern that the originally proposed effective dates and sell-through period were not adequate to address public health concerns and multimedia impacts, given that alternative products constitute the majority of the market and already comply with the ATCM. The modified time periods were made available to the public via a 15-day comment period that ran from May 12, 2000 to May 30, 2000. With the modifications, brake cleaners, carburetor cleaners, engine degreasers, or general purpose degreasers that contain Perc, MeCl, or TCE cannot be used in any California AMR facility after December 31, 2002.

Some of the commenters suggested that ARB should adopt time periods shorter than the ones the Board ultimately decided upon. The ARB believes that the even shorter time periods (such as an immediate ban) are not appropriate because they would result in too much disruption in the marketplace, and would not provide sufficient time for the ARB's outreach program to be effective.

20. Comment: OEHHA urges the Board to adopt this ATCM. OEHHA worked closely with the Board in the identification of Perc, MeCl, and TCE as Toxic Air Contaminants. In the process, the Scientific Review Panel (SRP) reviewed and approved the cancer inhalation unit risk factors developed by OEHHA for these three solvents, and the chronic Reference Exposure Level (REL) for Perc. These chemicals are also subject to the Air Toxics Hot Spots Information and Assessment Act of 1987 (Hot Spots Act). Under the Hot Spots Act and the SB 1731 amendments, the SRP reviewed and endorsed our acute RELs for Perc and MeCl. These unit risk factors and RELs are correctly listed in Table VI-1 of the staff report, and were used in the risk assessment supporting the ATCM. However, on February 1, 2000, the SRP endorsed an updated value of  $400 \mu\text{g}/\text{m}^3$  as the chronic REL for MeCl. The value was adopted by OEHHA on February 23, 2000. On April 13, 2000, the SRP endorsed an updated value of  $600 \mu\text{g}/\text{m}^3$  as the chronic REL for TCE. The value

was adopted by OEHHA on April 25, 2000. Since the two new values are lower than the values used in the risk assessment section of the staff report, the effect of the new values will be to increase the hazard indices for the two chemicals, by less than 10 percent for TCE, but by 750 percent for MeCl. (OEHHA)

Agency Response: RELs are used in risk assessments to estimate potential non-cancer health effects. A REL is defined as a concentration level at or below which no adverse non-cancer health impacts are expected to occur. Separate RELs are calculated for both acute and chronic non-cancer health effects. The updated RELs provided by OEHHA are for the chronic, non-cancer health effects of TCE and MeCl.

ARB staff have studied the impact that the updated chronic RELs would have on the risk assessments discussed in the staff report. The updated RELs essentially show that TCE and MeCl may cause health impacts at a lower exposure level than was previously believed. However, the chronic hazard indices for these two chemicals still do not exceed a level of concern, even when the updated RELs are used in the calculations. Because of this, the conclusions in the staff report that are based on an analysis of the RELs (see pages VI-12, 13, 15, 18, 21, and 28 of the staff report) remain the same regardless of whether the original or the updated RELs are used. It should be noted that the risk assessments indicated that an ATCM was necessary based on the potential for cancer health effects from Perc, MeCl, and TCE, in AMR products. The updated RELs for chronic non-cancer health effects do not alter any of the conclusions in the staff report, and do not require any changes in the regulatory provisions.

## **B. Responses to Comments Received during the First 15-day Comment Period**

### Comments Received during the 15-day Comment Period from May 12, 2000, to May 30, 2000

<u>Abbreviation</u>	<u>Commenter</u>
AAIA	Aaron M. Lowe, Vice President Government Affairs Automotive Aftermarket Industry Association written testimony: May 30, 2000
ACMC	John W. Carney, Group Executive Automotive Chemical Manufacturers Council written testimony: May 30, 2000

CAWA	Rodney K. Pierini, President California Automotive Wholesalers Association written testimony: May 30, 2000
CSMA	D. Douglas Fratz, Vice President Scientific & Technical Affairs Chemical Specialties Manufacturers Association written testimony: May 25, 2000
Gunk	James D. Wells, Vice President Chemical Operations Gunk - Radiator Specialty Company written testimony: May 23, 2000
HSIA	Stephen P. Risotto, Executive Director Halogenated Solvents Industry Alliance written testimony: May 30, 2000
LACSD	Charles W. Carry and Margaret H. Nellor Technical Services Department Los Angeles County Sanitation District written testimony: May 30, 2000
SWC	Doug Raymond, Director Regulatory Affairs The Sherwin-Williams Company written testimony: May 17, 2000

#### Comments and Responses

21. Comment: The changes made to the effective dates were arbitrary and their need has not been substantiated. Additionally, the changes differ from the effective dates in the original proposal and were made without input from industry and without the consideration of costs to manufacturers, distributors, and end users. (AAIA, CAWA, CSMA)

Agency Response: The ARB disagrees with this comment. As previously mentioned, the Board made changes to the originally proposed effective dates after considering the concerns of all interested parties. Based on comments that the Board receives during the 45-day comment period and at the Board hearing, the Board has the authority to make modifications to the proposal that it determines are necessary to protect the public health (see response to Comment No. 19).

As discussed in the staff report, the cost to end users is expected to be minimal. The cost to manufacturers and distributors is also expected to be minimal because industry can sell additional complying product to fill the void left by the removal of products containing Perc, MeCl, or TCE. The industry can also continue to market non-complying products outside of California. These costs should not be significantly impacted by the modifications to the effective dates.

22. Comment: The expedited effective dates will not give AMR facilities enough time to address safety and effectiveness issues. The original cease-manufacture effective date of December 31, 2002, is needed to be able to switch facilities over to other products which will address these issues and meet their needs. (HSIA, SWC)

Agency Response: Based on the comments received at the Board hearing and during the 45-day comment period, it is clear that safe and effective alternative products are already available. The availability, safety, and suitability of alternative products is also discussed in the staff report, based on data collected during the site visits and from the Facility Survey. The outreach program will further address the flammability of non-chlorinated aerosols and the availability of effective, non-flammable, non-chlorinated products. As a result, ARB staff believes that affected facilities do not need any additional time to comply with the ATCM.

23. Comment: Manufacturers do not have any control over their product once it is sold to retailers or distributors. The ARB currently recognizes this in its consumer products regulations by providing a three-year sell-through period. This sell-through period is needed to provide enough time for the product to be sold through the normal channel of commerce. The one-year sell-through period adopted by the Board may cause some product to be disposed of as hazardous waste. (SWC, APMC) At a minimum, the Board should add twelve months to the sell-through period (until June 30, 2003). (APMC)

Agency Response: The ARB believes that a one-year sell-through period is adequate for this ATCM, and does not agree that either a two or three year sell-through period is necessary. There exists a three-year sell-through period in ARB consumer products regulations because three years is required under Health and Safety Code section 41712(g). This required three-year period applies only to regulations adopted pursuant to section 41712. Such regulations are designed to reduce VOC emissions from consumer products, in order to help attain the state and federal ambient air quality standards for ozone. Section 41712 does not apply to ATCMs, which are intended to reduce adverse health effects from toxic air contaminants (TACs), and are adopted pursuant to Health and Safety Code sections 39665 *et seq.* For this ATCM, the Board basically decided the health effects of TACs used in AMR products were sufficiently egregious to justify a shorter, one-year sell through period for these products.

The ARB staff does not agree that a one-year sell-through period will have the negative effects suggested by the commenter. As mentioned in the following comment, in the normal course of events approximately 90 percent of most consumer products are sold

within one year from the date of manufacture. This 90 percent sell-through is what typically happens when there are no regulatory requirements that affect conduct in the marketplace. Here, manufacturers and distributors are aware of the upcoming regulatory requirements and can manage their inventory accordingly. Businesses have a great deal of practical experience in managing their inventories. We believe that the requirements of the ATCM, as well as the outreach program, will create a sense of urgency that will encourage businesses to deplete inventories of non-complying products. As a result, staff expects that almost all units will reach the end user within one year. For any units that may remain at distributors or retailers after the one year period has expired, we expect that businesses will redistribute these units outside of California, where they can be legally sold and used, instead of incurring the expense of disposing of such products as hazardous waste.

24. Comment: Over a decade ago, during the development of the first ARB consumer products regulations, CSMA performed a study on time needed for sell-through of products. Those data showed that on average, retail consumer products sold through at a rate of about 90 percent during the first year, 99 percent during the first two years, and about 99.9 percent within three years. The accelerated sell-through date could result in product recalls due to the amount of product that will still be in the distribution chain. The staff report did not discuss possible product recall costs associated with the ATCM. (CSMA)

Agency Response: ARB staff expects that the approaching effective dates and the outreach program will quickly reduce the demand for non-complying products. Staff also expects that good business management practices will cause most businesses to adjust their production and inventory to reflect the falling demand for non-complying products. As such, we expect that there will not be a need for a product recall, and product recall costs will not be an issue. Additional discussion of this issue is contained in the response to the previous comment.

25. Comment: The expedited effective dates are inconsistent with the statutory requirements for the consumer products program. A three-year sell-through period is needed to provide enough time for products to be sold through the normal channels of commerce. In the consumer products program, the sell-through period is recognized as important and necessary. (HSIA, SWC)

Agency Response: As discussed in the responses to the previous two comments, the expedited effective dates are consistent with all statutory requirements, and the ARB does not believe that a three-year sell-through period is necessary.

26. Comment: If the ARB insists on accelerating the compliance deadlines in this rule, we urge that ARB establish a sell-through date of no earlier than December 31, 2002, and eliminate the prohibition of use date that applies to automotive maintenance facilities. This would make the rule more consistent with the VOC-limit regulations with which our industry is accustomed, and in which there have been no need for limitations on consumer

use of non-complying products. (CSMA, ACMC) The use provision will be a major enforcement burden for both the agency and the regulated industry. (SWC)

Agency Response: As explained in the previous comments, the Board considered the concerns of all interested parties when it expedited the effective dates of the regulation. A December 31, 2002, sell-through date is not appropriate because it would unnecessarily prolong the time during which the public is exposed to perchloroethylene, methylene chloride, and trichloroethylene from AMR products. For the same reason, it is not appropriate to eliminate the December 31, 2002, use prohibition that applies to AMR facilities. It should be noted that this prohibition on product use applies only to AMR facilities, and is not a broad-based use prohibition that applies to consumers in general. Such an approach (i.e., restrictions on activities that take place at a facility) is consistent with other regulations that apply to stationary sources, and it is not germane to compare it to the approach taken in the more general consumer products regulations. Finally, ARB staff does not agree that the use prohibition will be a significant burden on either the ARB or the regulated industry. The local districts will have the primary responsibility for enforcing the use prohibition, and such enforcement can be integrated into district inspections, which are already being done at AMR facilities. Also, AMR facilities have considerable experience in complying with other health and safety rules, and the relatively simple requirements of this ATCM should not present a significant burden on these facilities.

27. Comment: The public did not have enough time to comment on the changes made to the effective dates, which were significant and beyond the scope of a 15-day comment period. (CAWA, CSMA, SWC)

Agency Response: The ARB believes that the public had sufficient opportunity to comment on the proposed changes. The ARB has met the requirements under Government Code section 11346.8(c) and title 1, CCR, sections 42 through 46 for a 15-day notice regarding sufficiently related changes to regulatory text. Eight comment letters were received associated with the 15-day notice, many of which addressed the effective dates in some manner. Some comments were seeking an extension of the effective dates while others were seeking an immediate ban of the non-complying products. The manner in which the ARB proceeded meets all applicable legal requirements. (see also *Western Oil and Gas Association v. Air Resources Board* (1984) 37 Cal.3d 502, 525-526)

The modifications to the effective dates were also within the scope of the notice for this rulemaking action. The Administrative Procedure Act (APA) provides that a state agency may make substantial changes to proposed regulations if the regulations, as modified, are sufficiently related to the original text so that the public had adequate notice that the change could result from the original proposal (see Government Code section 11346.8(c)). The courts have interpreted the APA to mean that substantial changes to the original proposal are authorized (i.e., are within the scope of the notice for the rulemaking action), so long as the modified proposal is devoted to the "same subject

or issue" as the original proposal (see *Schenley Affiliated Brands Corp. v. Kirby* (1971) Cal.App.3d 177, 193). Changes to the effective dates of the ATCM meet this standard, and are within the scope of the notice for this rulemaking action.

28. Comment: Manufacturers need more time to research and develop replacement products, address their competitive position, educate customers, eliminate existing inventories of non-complying products, and ensure a smooth transition. (AAIA, CSMA, Gunk, HSIA, SWC)

Agency Response: Due to the current availability and widespread use of effective complying non-chlorinated products, ARB staff believes that a research and development period is not necessary. HSIA indicated in their comment letter that one company did not produce a non-chlorinated product and needed more time to develop a complying product. The expedited dates give this company approximately 10 months from the Board hearing date to evaluate their position. The ATCM provides a variance procedure for manufacturers who feel they need more time to meet the requirements of the ATCM, and can meet the specified criteria for a variance. The variance provision in the ATCM is closely modeled on the variance provisions that currently exist in the ARB consumer products regulations, which have been successfully used for years.

ARB staff also believes that no additional time is necessary for product manufacturers to evaluate their competitive positions, ensure a smooth transition to complying non-chlorinated products, educate customers, or eliminate existing inventories. The outreach program that will be conducted by ARB staff will assure a smooth transition by alerting product manufacturers, distributors, and end users to the requirements of the ATCM. The outreach program will also provide information on the available non-chlorinated product options. The inventory management issue is addressed in the responses to Comment Nos. 24 and 25.

29. Comment: Expedited effective dates are urgently needed to meet new water quality standards. The new standards are more than 60 times more stringent than those that were in place at the time of the Board hearing (April 2000). Since substitutes are widely available, an immediate ban should be considered. We recommend that the effective date of the ATCM become June 30, 2000, instead of June 30, 2001. We further recommend that the sell-through period be shorted to six months, and that all uses of chlorinated solvents in automotive cleaning products be prohibited after June 30, 2001. (LACSD)

Agency Response: The Board's action addressed POTW concerns by reducing the total time period for compliance from 5 years to approximately 2.5 years. The commenter is asking that the effective dates and sell-through period be reduced even more. The ARB believes that the commenter's suggested dates are not appropriate because they would result in too much disruption in the marketplace, and would not provide sufficient time for the ARB's outreach program to be effective. POTW concerns may be further addressed by this outreach effort, which should cause distributors and end users to start reducing

their stock and usage of non-complying products in advance of the applicable effective dates.

30. Comment: The ATCM may impact competitiveness, require plant modifications, and product reformulation. Additionally, the ATCM may be costly and disruptive for manufacturers and adversely impact employment at manufacturing plants. (AAIA, CSMA, Gunk, HSIA)

Agency Response: An analysis of the economic impacts of the ATCM is presented in Chapter IX of the staff report. This analysis discusses the expected impacts on manufacturers and product price. The ARB expects that the number of units sold will remain constant but will be comprised of complying products. In this case, should one manufacturer choose not to market a complying product, then other manufacturers will supply a product to satisfy that demand. As such, total employment in the industry should not change.

31. Comment: Some product manufacturers may be unaware of the requirements of the ATCM and will not have enough time to comply. (AAIA)

Agency Response: The Board directed ARB staff to implement a public outreach program to inform and educate parties affected by the ATCM. This public outreach program will provide a forum for educating facility operators and distributors on the availability of alternative products and will provide technical assistance for complying with the ATCM. Additionally, ARB staff is planning to mail a compliance advisory to all known product manufacturers.

32. Comment: Suitable replacements for perchloroethylene and methylene chloride do not exist. (Gunk)

Agency Response: The ARB disagrees with this comment. As discussed in the Staff Report and at the Board hearing, suitable and effective replacements for perchloroethylene and methylene chloride-based products are readily available. For more information, please refer to the responses to Comment Nos. 7 and 8.

33. Comment: According to product manufacturers, AMR facilities have expressed concerns about the flammability of alternatives. As a result, facilities will have to choose between safety and low cost. (Gunk, HSIA)

Agency Response: The ARB disagrees with this comment. The site visits showed clearly that AMR facilities typically select the lowest cost product. In doing so, they may receive flammable products in some instances and non-flammable products in others. Additionally, ARB surveys have shown that while flammable aerosols are prevalent in AMR facilities, they did not pose any clearly identifiable safety risk. Water-based products, which are another alternative, are non-flammable. For more information, please refer to the responses to Comment Nos. 7 and 8.



34. Comment: The implementation of this ATCM will result in an increase in VOC emissions. (Gunk)

Agency Response: This comment is addressed in the responses to Comment Nos. 9 and 13.

35. Comment: The motivation behind the decision to expedite the effective dates is political and will result in an attempt by the industry to change that decision. (Gunk)

Agency Response: The Board's decision to expedite the effective dates was made in consideration of the concerns expressed by product manufacturers as well as those of POTWs, environmental groups, and community health groups who were seeking a substantially faster implementation of the ATCM.

36. Comment: There is still a problem with the rule language in section 93111(h) of the ATCM, regarding ARB Method 310 applicability. While the 15-day change to 93111(h)(2) is an improvement, it does not fully clarify how Method 310 will be used for compliance determinations. While substituting "chlorinated toxic air contaminant" for "VOC" does not create significant confusion in sections 3.5 and 3.7 of Method 310, the actual analytical test methodology used to determine the amounts of Perc, MeCl and TCE in products is actually found elsewhere in Method 310. The substitution of "chlorinated toxic air contaminant" for "VOC" in various other sections of Method 310 does indeed create significant potential confusion. Taken literally, any product found by Method 310 to have more than one percent VOC would be considered to have more than one percent "chlorinated toxic air contaminants." We continue to believe that subsection 93111(h)(2) is unnecessary and should be deleted. (CSMA)

Agency Response: The response to Comment No.12 contains a discussion of a similar comment made during the 45-day comment period. To expand on this earlier discussion, the ARB staff believes that the 15-day change does fully clarify how Method 310 will be used for compliance determinations. The commenter admits that ARB's proposed language does not create significant confusion in sections 3.5 and 3.7 of the ATCM. It is therefore difficult to understand the commenter's concern, since section 93111(h)(1) specifically states that sections 3.5 and 3.7 of Method 310 will be used to determine compliance. The commenter goes on to state that the confusion lies in "various other sections" of Method 310, without specifying which sections could cause confusion. The ARB staff does not know what sections of Method 310 are being referred to, and staff is not aware of any sections where confusion could be a problem.

The commenter further indicates that the potential "confusion" would be caused only if the language is "taken literally." ARB staff does not believe there is any problem with the language in the first place, whether it is "taken literally" or not, but staff can reassure the commenter that the ARB (which will be using Method 310 and enforcing the ATCM) does not adhere to the nonsensical construction of the language that the commenter

suggests is a possible one. It should be noted that for the purposes of the ATCM, a "chlorinated toxic air contaminant" is defined in the ATCM as meaning perchloroethylene, methylene chloride, and trichloroethylene. No other compounds are regulated under the ATCM, so there should be no problem with misinterpretation. Finally, the commenter does not suggest any way to fix the supposed "problem" with the language other than deleting it entirely, and the response to Comment No. 12 explains why this is not a viable alternative.

### **C. Responses to Comments Received during the Second 15-day Comment Period**

Comments Received during the Supplemental 15-day Comment Period from September 19, 2000, to October 5, 2000

#### Abbreviation

#### Commenter

DPR

Douglas Y. Okumura, Acting Assistant Director  
Division of Enforcement, Environmental Monitoring  
And Data Management  
Department of Pesticide Regulation  
written testimony: October 4, 2000

#### Comments and Responses

37. Comment: The Department of Pesticide Regulation has no comments on this proposed regulation. (DPR)

Agency Response: No response required.